National Aeronautics and
Space Administration

Washington, D.C.
20546

Office of the Administrator

AUG 24 1983

The Honorable James A. Baker, III
Chief of Staff and Assistant
to the President
The White House
Washington, D.C. 20500

Dear Jim:

I have just spoken with Al Shepard. He told me about your interest in the Space Station and relayed your request for some background information. I have enclosed a number of papers which will familiarize you with our argumentation, which present Mac Baldridge's strong views on the program, and which provide some information on the history and current state-of play of this endeavor. Also, following up on your conversation with Al, I am enclosing a statement that might be used by the President in announcing a decision to go ahead with the Space Station.

As you know, the President is being given the choice to commit this nation to the development of a permanently manned Space Station, or to defer that commitment until we study it some more. I am convinced that we are ready to proceed: the Space Shuttle -- the key to our routine access to space -- is available; the technologies needed for the Space Station are understood and their development is within reach; and commercial and scientific requirements for the Space Station exist now.

NASA has been studying the Space Station for years. If the President decides to commit to the program, hardware construction could begin in 1987 and the station could be operational by 1991. We estimate that the cost of the program would be approximately $8 billion spread over the next eight years, with FY 1985 costs of approximately $225 million. The first step in the program would be an intensive planning and definition period; the bulk of the spending would not begin until the hardware development phase in 1987. The early planning years would give us the opportunity to get a good handle on the system design and costs before major costs are

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25th Anniversary
1958-1983

incurred. Because of our extensive efforts to date, however, I am convinced that this program is as well estimated as any other similar program at this stage of development.

After several years of uncertainty in the last Administration, this Administration's National Space Policy goal of expanding US private sector investment and involvement in space has generated a substantial momentum. During an August 3 presentation to the President, industry representatives were emphatic about their support for a Space Station because of its commercialization potential. The private sector told the President that it now needs stability in the civil space program and national commitment to a Space Station if real capital is to be put at risk. Moreover, this is just the beginning. A Space Station will provide us the opportunity to learn through experience and to uncover new ways to use space.

Mac Baldrige and I are convinced that commercial and scientific needs -- and, just as importantly, commercial and scientific potential -- warrant this undertaking. Because the program is justified on the basis of civil needs, NASA would undertake it as part of the nation's civil space program. Despite the current absence of formal national security requirements, I believe that a civil Space Station would serve as a valuable national resource. It could enable the National Security Community to do research and to explore the potential military uses of a permanently manned space facility.

It is very important to recognize that the Soviets have already committed to a permanent manned presence in space; the Intelligence Community estimates that they will achieve this goal by 1986. The Intelligence Community also believes that the Soviets will conduct this program so as to receive frequent worldwide attention and to enhance Soviet prestige. Immediate initiation of a U.S. Space Station would serve to counterbalance this highly visible Soviet challenge to our space leadership. It would also put us in a position to learn as much about man's permanent role in space as they are learning.

Foreign participation in this highly visible, prestigious program would also give our friends and allies the opportunity to continue to share in the benefits of our civil space program. I am confident that, based on NASA's 25-year experience with international collaboration in high technology programs, cooperation can be structured so as to minimize any risk of unwarranted technology transfer.

The choice for the President is either to commit or to defer. It is becoming increasingly clear that the Space Station will be this nation's next major space venture. If we move now, Americans will be permanently in space just as the Space Shuttle celebrates its 10th anniversary. NASA is ready. Further study is not required. This nation has been in space for 25 years and it is this President's opportunity to take the next bold step forward.

With highest regards,

Sincerely,

James M. Beggs
Administrator

Enclosures

1) Argumentation for Space Station
2) Argumentation against deferral
3) Beggs to Clark letter
4) Baldrige to Clark letter
5) History and current state-of-play
6) Presidential announcement

ARGUMENTATION FOR SPACE STATION OPTION
(from SIG(Space) Issue Paper)

- United States space leadership is being actively challenged by the Soviets. NASA believes that what the Soviets have learned during their Salyut program has led them to commit to developing a permanently manned, primarily military Space Station. A visible, highly publicized, continuously manned Soviet Space Station will receive frequent worldwide attention and enhance Soviet prestige. Thus, some believe that a U.S. Space Station would define a "race" which the U.S. would be widely perceived as having lost. However, proponents of this option are confident that the U.S. Space Station will be more capable and even more highly visible. An immediate commitment to a U.S. Space Station is essential to counter the Soviet challenge to our space leadership and to put us in a position to learn as much about man's permanent role in space as the Soviets have learned. Furthermore, a Space Station will enable us to compete in "races" yet to be defined, such as a manned lunar base or a manned Mars mission which the Intelligence Community believes could be undertaken by the Soviets within the next 15 years.

- A Space Station is the fulfillment of the President's July 4, 1982, statement that "we must look aggressively to the future by demonstrating the potential of the Shuttle and establishing a more permanent presence in space." A Space Station is necessary to maintain real and perceived U.S. leadership in space and also to best satisfy many of the goals and objectives of the National Space Policy. In particular, a Space Station will enable us to conduct civil and commercial activities in space that will satisfy the National Space Policy goal of obtaining economic and scientific benefits through the exploitation and exploration of space.

- A permanently manned Space Station is the preferred vehicle for conducting the vast majority of existing and projected civil and commercial space missions. A Space Station presents the most efficient and effective alternative for satisfying the full range of these needs. Furthermore, the number of civil and commercial needs that are better served by other alternatives is limited.

- A U.S. decision to develop a permanently manned Space Station would be a reaffirmation to the world of American's commitment to technological superiority and to space leadership.

- Foreign participation in this highly visible program would give our allies the opportunity to continue to share in the benefits of our civil space program. Foreign participation in the Space Station would also reap the benefit to the U.S. of limiting foreign resources available for cooperation with the Soviets or for undertaking large, potentially competing programs of their own. At the same time, international involvement in a Space Station could be used to counter Soviet propaganda attempts related to the U.S. space program.

- NASA's civil space program is consistent with the priorities established in the President's policy guidance and honors the Administration's prior commitments embodied in on-going NASA programs. Because the Space Transportation System is the primary launch system for both national security and civil government missions, and because the first priority of the STS program is to make the Space Shuttle fully operational and cost-effective, high NASA priority is placed in this area. NASA is convinced that the development of a permanently manned Space Station is necessary to maintain real and perceived U.S. leadership in space and also to best satisfy many of the other goals and objectives of the National Space Policy. In particular, a Space Station would enable the U.S. to conduct civil and commercial activities in space to satisfy the National Space Policy goal of obtaining economic and scientific benefits through the exploitation and exploration of space. Because of this conviction, NASA believes that the U.S. should undertake a Space Station at any NASA budget level. However, to conduct the Space Station program effectively and to utilize it to its fullest, the level and pace of total NASA funding should be sufficient to maintain focused and vigorous efforts in all areas of the civil space program. Furthermore, a civil Space Station program should not adversely affect current and projected space programs and overall priorities in the military and intelligence sectors.

NASA and private industry have looked at civil and commercial needs for space missions. This NASA assessment indicates that a permanently manned civil Space Station is the preferred means for conducting the majority of those missions. The Space Station would provide the following capabilities:

- A permanently manned Space Station is absolutely necessary if we are to understand man's role in space. What we have learned so far makes it clear that the physical and psychological aspects of long-duration visits cannot be extrapolated from short-visit data. Furthermore, we only learn by doing--the facilities and equipment to allow us to work in space are part of the Space Station.

- The Space Station could enable extensive commercial exploitation of space by providing capabilities that are not currently available to the private sector. These capabilities arise because the Space Station would uniquely couple manned presence with unlimited stay-time in orbit.

- The Space Station would be a permanent base for the efficient tending, servicing and repair of unmanned platforms and satellites, thereby increasing the lifetime of expensive space assets and offering the flexibility to upgrade space systems as technology improves. This efficiency derives from the fact that the servicing equipment is stored on the station and does not have to be brought up on the Shuttle for each individual servicing mission.

- The Space Station would also enable the on-orbit assembly and check-out of large space structures such as antennas, astronomical telescopes, and satellites prior to their deployment.

ARGUMENTATION AGAINST DEFERRAL OPTION
(from SIG(Space) Issue Paper)

- NASA is ready to begin the development of a Space Station. The Shuttle, always envisioned as a precursor to a Space Station, is now available. The technology requirements are understood and research is under way. Most importantly, the Space Station is needed to satisfy the full range of existing and projected civil and commercial space needs for the rest of the century.

- NASA believes that the undertaking of a civil Space Station is not premature, but rather will provide an important resource for the national security community. The civil Space Space Station would provide a facility in being for future national security activities at such time that the national security community develops requirements for a manned presence with unlimited stay-time in orbit. That the Soviets have defined their own national security requirements and are meeting them now with an operational system suggests that future U.S. national security requirements will emerge and will need to be satisfied. In the meantime, Amercians will be learning how to live and work in space.

- After several years of uncertainty in the previous Administration, the nation's civil space program has now built up substantial momentum. A Space Station will maintain this all-important momentum. A decision now to defer the station's development will damage this momentum. It will act as a brake upon the entire civil program and upon U.S. space commercialization efforts. It will send the wrong signals abroad with respect to U.S. commitments to space leadership and technological superiority.

- Self-generated international interest in a U.S. Space Station has led Europe, Japan and Canada to earmark close to $5 million of their own funds for independent planning studies. They are now approaching major decision points on their own space activities for the next decade. In each case, collaboration on Space Station is juxtaposed against the undertaking of large, competitive national programs. Delay in our proceeding with a Space Station could have the effect of precluding significant international investment in our program, and diverting foreign space expenditures into competing efforts.

- In announcing our National Space Policy on July 4, 1982, President Reagan asserted that "we must look aggressively to the future by demonstrating the potential of the Shuttle and establishing a more permanent presence in space." On April 11, 1983, he personally directed a study to serve as the basis for a decision on whether or not to proceed with the NASA development of a permanent manned Space Station. NASA is ready to respond to the President. Further study of this issue is not required. The nation has been in space for 25 years and it is this President's opportunity to take the next major step forward.